Listing and Amendments to the Claims

This listing of claims will replace all previous versions and listings of claims in this application:

1. **(Currently Amended)** A method ~~(100)~~ for providing bandwidth fairness in wireless networks, comprising:

receiving ~~a set~~ at least one stream of packets ~~(46C)~~ on an access point ~~(20)~~ for [[a]] at least one wireless station ~~(46C)~~;

setting a more fragment bit of the ~~set~~ at least one stream of packets ~~(46C)~~ when there are successive packets in the at least one stream of packets; and

transmitting the successive packets of the ~~set~~ at least one stream of packets from the access point ~~(20)~~ to the at least one wireless station ~~(46C)~~ without back-off.

2. **(Currently Amended)** The method ~~(100)~~ of claim 1, wherein the step of setting the more fragment bit, comprises setting the more fragment bit in a MAC header accompanying the ~~set~~ at least one stream of packets ~~(46C)~~ to a value of 1.

3. **(Currently Amended)** The method ~~(100)~~ of claim 1, wherein the ~~set~~ at least one stream of packets ~~(46C)~~ comprises a plurality of packets.

4. **(Currently Amended)** The method ~~(100)~~ of claim 1, wherein the more fragment bit is not set in a last of the ~~set~~ at least one stream of packets ~~(46C)~~ to be transmitted.

5. **(Currently Amended)** [[A]] The method ~~(200)~~ as defined in claim 1 for providing bandwidth and airtime fairness in wireless networks, comprising:

receiving a packet ~~(34)~~ on ~~an~~ the access point ~~(20)~~ for [[a]] the at least one wireless station ~~(22A)~~;

calculating an airtime requirement for transmitting the packet ~~(34)~~ to the at least one wireless station ~~(22A)~~;

setting a time counter ~~(50)~~ on the access point ~~(20)~~ based on the airtime requirement; and

determining whether the packet ~~(34)~~ can be transmitted before the time counter ~~(50)~~ expires.

6. **(Currently Amended)** The method ~~(200)~~ of claim 5, further comprising transmitting the packet to the access point.

7. **(Currently Amended)** The method ~~(200)~~ of claim 5, further comprising splitting the packet ~~(34)~~ into a set of fragments ~~(48)~~ if the packet ~~(34)~~ cannot be transmitted before the time counter ~~(50)~~ expires.

8. **(Currently Amended)** The method ~~(200)~~ of claim 7, further comprising transmitting the set of fragments ~~(48)~~ until the time counter ~~(50)~~ expires.

9. **(Currently Amended)** The method ~~(200)~~ of claim 7, wherein the splitting step comprises splitting the packet ~~(34)~~ into equal sub-packets to yield a set of fragments ~~(48)~~.

10. **(Currently Amended)** The method ~~(200)~~ of claim 5, wherein the airtime requirement is calculated based on a size and a transmission rate of the packet.

11. **(Currently Amended)** ~~An~~ The access point ~~(20)~~ as defined in claim 23 for providing airtime and bandwidth fairness in wireless networks, further comprising:

means for calculating ~~(38)~~ an airtime requirement for a packet ~~(34)~~ received on ~~an~~ the access point ~~(20)~~ for [[a]] the at least one wireless station ~~(22A)~~;

means for setting ~~(44)~~ a time counter ~~(50)~~ based on the airtime requirement; and

means for determining ~~(38)~~ whether the packet ~~(34)~~ can be transmitted to the at least one wireless station ~~(22A)~~ before the time counter ~~(50)~~ expires.

12. **(Currently Amended)** The access point ~~(20)~~ of claim 11, further comprising means for communicating ~~(32)~~ the packet ~~(34)~~ if the packet ~~(34)~~ can be transmitted to the at least one wireless station ~~(22A)~~ before the time counter ~~(50)~~ expires.

13. **(Currently Amended)** The access point ~~(20)~~ of claim 11, further comprising means for splitting ~~(40)~~ the packet ~~(34)~~ into a set of fragments ~~(48)~~ if the packet ~~(34)~~ cannot be transmitted to the at least one wireless station ~~(22A)~~ before the time counter ~~(50)~~ expires.

14. **(Currently Amended)** The access point ~~(20)~~ of claim 13, wherein the means for splitting ~~(40)~~ the packet ~~(34)~~ splits the packet ~~(34)~~ into equal sub-packets to yield the set of fragments ~~(48)~~.

15. **(Currently Amended)** The access point ~~(20)~~ of claim 11, the airtime requirement is calculated based on a size and a transmission rate of the packet ~~(34)~~.

16. **(Currently Amended)** The access point ~~(20)~~ of claim 11, wherein the access point ~~(20)~~ is a wireless access point ~~(20)~~ implemented within a wireless local area network.

17. **(Currently Amended)** [[A]] The program product ~~(35) stored on a recordable medium~~ as defined in claim 24, wherein said medium having stored thereon machine readable instructions that, when executed, implement [[a]] the method for providing airtime and bandwidth fairness in wireless networks, ~~which when executed, comprises~~ said method comprising:

~~program code for~~ calculating ~~(38)~~ an airtime requirement for a packet ~~(34)~~ received on ~~an~~ the access point ~~(20)~~ for [[a]] the at least one wireless station ~~(22A)~~;

~~program code for~~ setting ~~(44)~~ a time counter ~~(50)~~ based on the airtime requirement; and

~~program code for~~ determining ~~(38)~~ whether the packet ~~(34)~~ can be transmitted to the at least one wireless station ~~(22A)~~ before the time counter ~~(50)~~ expires.

18. **(Currently Amended)** The program product ~~(35)~~ of claim 17, further comprising program code for communicating ~~(32)~~ the packet ~~(34)~~ if the packet ~~(34)~~ can be transmitted to the at least one wireless station ~~(22A)~~ before the time counter ~~(50)~~ expires.

19. **(Currently Amended)** The program product ~~(35)~~ of claim 17, further comprising program code for splitting ~~(40)~~ the packet ~~(34)~~ into a set of fragments ~~(48)~~ if the packet ~~(34)~~ cannot be transmitted to the at least one wireless station ~~(22A)~~ before the time counter ~~(50)~~ expires.

20. **(Currently Amended)** The program product ~~(35)~~ of claim 19, wherein the program code for splitting ~~(40)~~ the packet ~~(34)~~ splits the packet ~~(34)~~ into equal sub-packets to yield the set of fragments ~~(48)~~.

21. **(Currently Amended)** The program product ~~(35)~~ of claim 17, the airtime requirement is calculated based on a size and a transmission rate of the packet ~~(34)~~.

22. **(Currently Amended)** The program product ~~(35)~~ of claim 17, wherein the program product ~~(35)~~ is implemented on ~~an~~ the access point ~~(20)~~ that is implemented within a wireless local area network.

23. **(New)** An access point for providing bandwidth fairness in wireless networks, comprising:

means for receiving at least one stream of packets for at least one wireless station;

means for setting a more fragment bit of the at least one stream of packets when there are successive packets in the at least one stream of packets; and

means for transmitting the successive packets of the at least one stream of packets from the access point to the at least one wireless station without back-off.

24. **(New)** A program product stored on a recordable medium, said medium having stored thereon machine readable instructions that, when executed, implement a method for providing bandwidth fairness in wireless networks, said method comprising:

receiving at least one stream of packets on an access point for at least one wireless station;

setting a more fragment bit of the at least one stream of packets when there are successive packets in the at least one stream of packets; and

transmitting the successive packets of the at least one stream of packets from the access point to the at least one wireless station without back-off.